

ABSTRACT OF THE DISCLOSURE

The present invention relates to a non-volatile semiconductor memory device and a fabricating method thereof, which prevents a programming disturbance and enables to have a programming operated by a byte unit by achieving a programming and an erasing of a memory device through a F-N tunneling. The semiconductor memory device can be a non-volatile semiconductor memory device that can include a control gate on a semiconductor substrate in which a device active area and a device isolation are defined, the control gate on the device active area dividing the device active area into a first region and a second region, a first insulating layer covering a top surface and sides of the control gate, a drain region in the first region of the substrate adjacent the control gate, a source region in the second region, a second insulating layer on the second region between the source region and the control gate and on a portion of a surface of the first region between the first insulating layer and the drain region, and a floating gate covering the second insulating layer and the first insulating layer.